AMENDMENT TO THE CLAIMS

Please amend claims 1, 18, 26 and 43 as follows (all pending claims and their status identifiers are reproduced below):

1. (Currently amended) A method for heating a roller used in at least one of a production and finishing of a web of material, comprising heating the roller from the outside by a heated gas mixture,
wherein said mixture is fed to at least one mixing element upstream or downstream of at least one burner; and
wherein said burner is arranged in an air-moving chamber.

2. (Previously presented) The method according to claim 1, wherein a fuel gas is generated by at least one burner arranged near a surface of the roller for the heating of the roller.

3. (Previously presented) The method according to claim 2, wherein the fuel gas emerging from the at least one burner acts on the surface of the roller for the heating of the roller.

4. (Previously presented) The method according to claim 1, wherein the roller is heatable on a zone basis viewed in a direction of a roller axis, with various zones being heatable independently of each other at least in part for the heating of the roller.

5. (Previously presented) The method according to claim 2, wherein several burners are distributed over the length of the roller for the heating of the roller.

6. (Previously presented) The method according to claim 2, wherein the at least one burner is a catalytic burner for generating heated gas through combustion of a fuel with one of air or oxygen for the heating of the roller.

7. (Previously presented) The method according to claim 2, wherein the at least one burner comprises a carrier with catalytic coating for the heating of the roller.

8. (Previously presented) The method according to claim 1, wherein a fuel gas is utilized as fuel for the heating of the roller.

9. (Previously presented) The method according to claim 2, wherein the at least one burner is fed with a particular adjustable fuel gas and air mixture for the heating of the roller.

10. (Previously presented) The method according to claim 9, wherein the fuel and air are fed to a mixing element installed upstream from the at least one burner for the heating of the roller.

11. (Previously presented) The method according to claim 6, wherein a supplied air is distributed by an air distributor among several burners for the heating of the roller.

12. (Previously presented) The method according to claim 1, wherein a reaction or roller temperature is one of adjusted or controlled by a fuel and air mass flow ratio for one of adjusting or controlling the heating of the roller.

13. (Previously presented) The method according to claim 1, wherein a fuel gas mass flow is controlled for one of adjusting or controlling the heating of the roller.

14. (Previously presented) The method according to claim 1, wherein a fuel gas concentration in air is controlled for one of adjusting or controlling the heating of the roller.

15. (Previously presented) The method according to claim 1, wherein a respective control is performed on a zone basis for one of adjusting or controlling the heating of the roller.

16. (Previously presented) The method according to claim 1, wherein one of hydrogen or hydrogen-rich gas is utilized as fuel for the heating of the roller.

17. (Previously presented) The method according to claim 1, wherein natural gas is utilized as fuel for the heating of the roller.

18. (Currently amended) The method according to claim 1, wherein ~~a respective burner is arranged in an air-moving chamber and~~ air flowing over the burner is mixed with burner waste gas for the heating of the roller.

19. (Previously presented) The method according to claim 18, wherein the air flowing over the burner is mixed with the waste gas from the burner by a mixing element in a region of the end of the air-moving chamber facing the roller for the heating of the roller.

20. (Previously presented) The method according to claim 1, wherein hot gas generated by a burner is mixed with supplied cold air in at least one mixing element in order to generate heated gas for acting on the roller for the heating of the roller.

21. (Previously presented) The method according to claim 20, wherein the mass flow of the cold air fed to the mixing element is one of adjustable or controllable for one of adjusting or controlling the heating of the roller.

22. (Previously presented) The method according to claim 20, wherein the burner is fed with air and fuel for the heating of the roller.

23. (Previously presented) The method according to claim 22, wherein the fuel is natural gas for the heating of the roller.

24. (Previously presented) The method according to claim 20, wherein hot gas generated by the burner is distributed by a gas distributor among several mixing elements that are distributed over the length of the roller for the heating of the roller.

25. (Previously presented) The method according to claim 24, wherein mass flows of cold air fed to the several mixing elements are one of separately adjustable or controllable at least in part, for one of adjusting or controlling the heating of the roller.

26. (Currently Amended) A method for heating a roller, the method comprising:
heating a first gas in a first axial zone;
directing the first gas toward the roller to achieve a first surface temperature;
heating a second gas in a second axial zone; and

directing the second gas toward the roller to achieve a second surface temperature,

wherein the first axial zone and the second axial zone are located exterior to the roller and along distinct axial locations adjacent the roller and at least one of the first gas and the second gas is mixed in at least one mixing element.

27. (Previously presented). The method of claim 26, wherein the first gas is produced by a fuel supplied to a burner.

28. (Previously presented). The method of claim 26, wherein the first surface temperature is distinct from the second surface temperature.

29. (Previously presented) The method of claim 26 further comprising:

heating a third gas in a third axial zone; and

directing the third gas toward the roller to achieve a third surface temperature.

30. (Previously presented) The method of claim 27, wherein the burner comprises one of a catalytic burner or a carrier having a catalytic coating.

31. (Previously presented) The method of claim 27, wherein the fuel is a fuel gas.

32. (Previously presented) The method of claim 31, wherein the fuel gas to air ratio is adjustable.

33. (Previously presented) The method of claim 32, wherein the fuel gas and air enter a mixing element prior to entering the burner.

34. (Previously presented) The method of claim 32, wherein an air distributor supplies air for at least the first and second axial zones.

35. (Previously presented) The method of claim 31, wherein the fuel gas has a variable mass flow rate.

36. (Previously presented) The method of claim 31, wherein the fuel gas comprises one of hydrogen or natural gas.

37. (Previously presented) The method of claim 27, wherein the first gas comprises output from the burner and burner waste gas.

38. (Previously presented) The method of claim 37, wherein the output from the burner is combined in a mixing element with the burner waste gas.

39. (Previously presented) The method of claim 27, wherein the first gas is mixed in a mixing element with a first air input to produce a first heat gas.

40. (Previously presented) The method of claim 39, wherein the first air input is variable.

41. (Previously presented) The method of claim 39, wherein a gas distributor directs the first heat gas through a first axial mixing element.

42. (Previously presented) The method of claim 41, wherein the first air input is variable.

43. (Currently Amended) An apparatus for heating a roller, the apparatus comprising:

a first axial zone for heating a first gas;

a first exit zone defining a portion of the first axial zone;

a second axial zone for heating a second gas; ~~and~~

a second exit zone defining a portion of the second axial zone[[,]]; and

at least one mixing element for at least one of the first gas and the second gas, and air,

wherein the first and second exit zones are located exterior to the roller and define distinct axial locations along the roller.

44. (Previously presented) The apparatus of claim 43 further comprising:

a first burner for producing the first gas, whereby fuel is input to the first burner.

45. (Previously presented) The apparatus of claim 43 further comprising:

an adjustable fuel to air ratio.

46. (Previously presented) The apparatus of claim 45 further comprising:

a mixing element for the fuel and air.

47. (Previously presented) The apparatus of claim 46 further comprising:

an air distributor for supplying air to the burner.